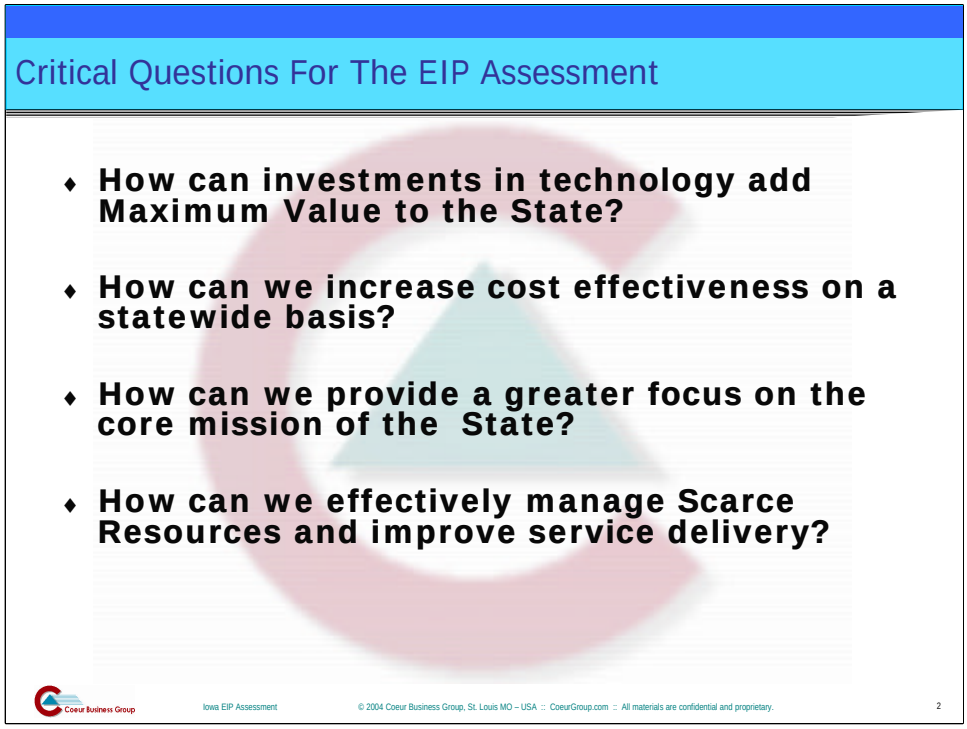
State of Iowa
EIP Steering Committee
September 24, 2004

Process and Program Findings and Recommendations



These key questions are based on the recent assessment of IT and technology requirements, value perception surveys and operational maturity assessments, business success factors, business drivers and alignment to House file 534 requirements.

These questions include:

How can investments in technology add maximum value to the state?

How can we increased cost effectiveness on a statewide basis?

How can we provide a greater focus on the core mission of the state?

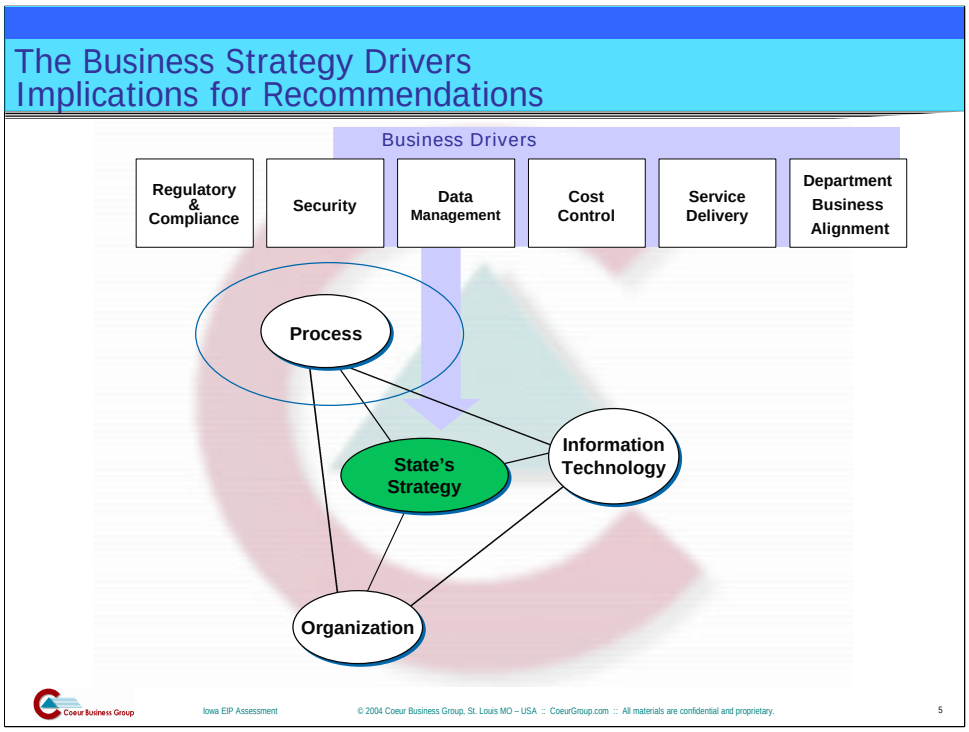
How can we effectively manage scarce resources and improve service delivery

These questions are a consolidation of the analysis Coeur Group assessed across the 43 departments included in the EIP assessment process.

Today's Session Agenda

- **Coeur Intro**
- **What We found**
- **How we analyzed the findings**
- **Resulting in specific conclusions for Iowa**

Key Findings



6 key business drivers have been identified which help determine the direction of the recommendations which Coeur Group is providing. These drivers have been derived from Executive interviews, value perception surveys and key technology maturity components of IT operations. These Business Drivers are common across all 40 departments and include;

Regulatory and Compliance drivers

Security Drivers

Data management and access drivers

Cost control drivers

Service Delivery Drivers, and

Department and Technology alignment Drivers

We will make recommendation over the next 30 to 40 days which will include Process recommendations, Information Technology recommendations as well as Organizational recommendations.

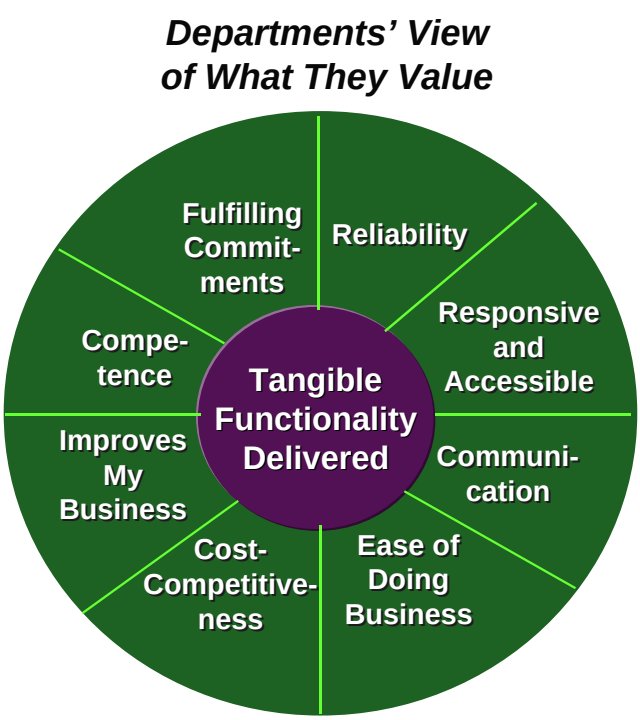
This session will focus on the "Processes" and recommendations as defined by the assessment tools and methods.

During the Discovery phase of this project, key business requirements of Information Technology were addressed. Common themes emerged which indicate cross departmental desires and needs. These elements are defined as the "Business Requirements Definition".

Assessment Methods and Process

- **What did we look at**
  - ***Business Architecture***
  - ***Information Architecture***
  - ***Relationship Architecture***
- **How did we find it**
  - ***Critical Success Factor Interviews (CSF's)***
  - ***Value Perception Survey***
  - ***Operational Maturity Assessment (CoBIT, ITIL and IT Standards Org)***
  - ***Financial Perspectives (Research, Document reviews, surveys)***
- **How did we analyze the information**
  - ***Proven Methods***
  - ***Models***
  - ***Tools***
    - **Statistical analysis**
    - **Empirical evidence**
    - **Factual evidence**
    - **Observational aspects**

Common Vision Requirements for Information Technology



During the Discovery phase of this project, key business requirements of Information Technology were addressed. Common themes emerged which indicate cross departmental desires and needs. These elements are defined as the "Common Executive Vision", or the common denominators of expectations which technology must deliver to the Departments.

These included:

Reliability of Information Technology

Responsiveness and accessibility

Communication between IT and the Department management

Ease of doing business

Cost Competitiveness

A focus on IT improving the departmental business

Competence of IT personnel

Fulfilling commitments

Initial Top Level Findings

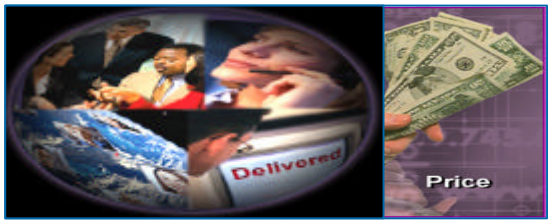
- Leverage Statewide Vendor Relationships
- Utilize ICN as the Connectivity Standard Statewide
- Reliability Of Statewide ITE Services At Question
- Need For 24 X 7 Helpdesk Functionality (Multiple Exist)
- Perception For Need Of “Market Pricing” For ITE Central Services
- Defined Need For ITE Marketing Of Services
  - ***Statewide Catalogue Of Services***
  - ***Competitive Pricing Clarifications***
  - ***Promotional Information***
  - ***SLA’s, Defined***
- Relationship Management Required is a key business requirement
- Sharable Data and Information
  - ***Shareable Data/Information***
  - ***Security And Confidentiality Management***

Initial findings included a business requirements for each of the following areas. Each one of these areas defines a requirement which can be implemented in a short term timeframe.

Iowa Common Business Drivers

1. **Security**
   1. *User access*
   2. *Homeland Security*
   3. *Intrusion Detection*
2. **Data Management**
   1. *Integrity*
   2. *Accessibility*
   3. *Storage*
3. **Regulatory**
   1. *Compliance*
   2. *Federal /State Programs*
4. **Cost Management**
   1. *Effectiveness/Efficiencies*
   2. *Avoidance*
5. **Service Delivery**
   1. *Problem Management*
   2. *Change Management*
   3. *Service Level Agreements*
6. **Business/Constituent Alignment**
   1. *Funding Process*
   2. *Constituency Alignment*
   3. *Strategic Focus*

Based on Departmental Executive and staff interviews and surveys, the 6 common Business Drivers have been identified as shown above.



Value Perceptions

Coeur Business Group

What is The Value of Information Technology?

Business

Firm Grasp of IT Business Value
Position Role and Use of IT within Business
Respond to Competitive Technology Opportunities or Threats
Time Critical Deployment of IT
Develop and Maintain Competitive IT Capability
Continual IT Business Alignment

Leadership

Establish and Align Expectations for IT
Reskill IT Personnel to be Business Literate
Establish and Maintain IT Processes
Promote and Drive IT Value Initiatives
Manage Change and Culture Issues
Measure and Communicate Value of IT

Technology

Deploy and Maintain Applications
Establish Stable and Reliable Operations
Deploy & Maintain Infrastructure
Establish and Maintain Sourcing Strategies
Manage Technology Obsolescence
Manage Critical Risks

The Value Perception Survey was utilized to define Gaps in current state IT to those of "Best Practice" organizations as well as emerging practice areas. The 18 categories above are the "Best Practices" for generating value from Investment in technology and IT organizations.

Management Perceptions of Value

Value of IT Assessment

- **Executive Views & Perceptions**
- **IT and ITE Views and Perceptions**
- **Gap Analysis**
- **"Best Actions to Best Practices"**

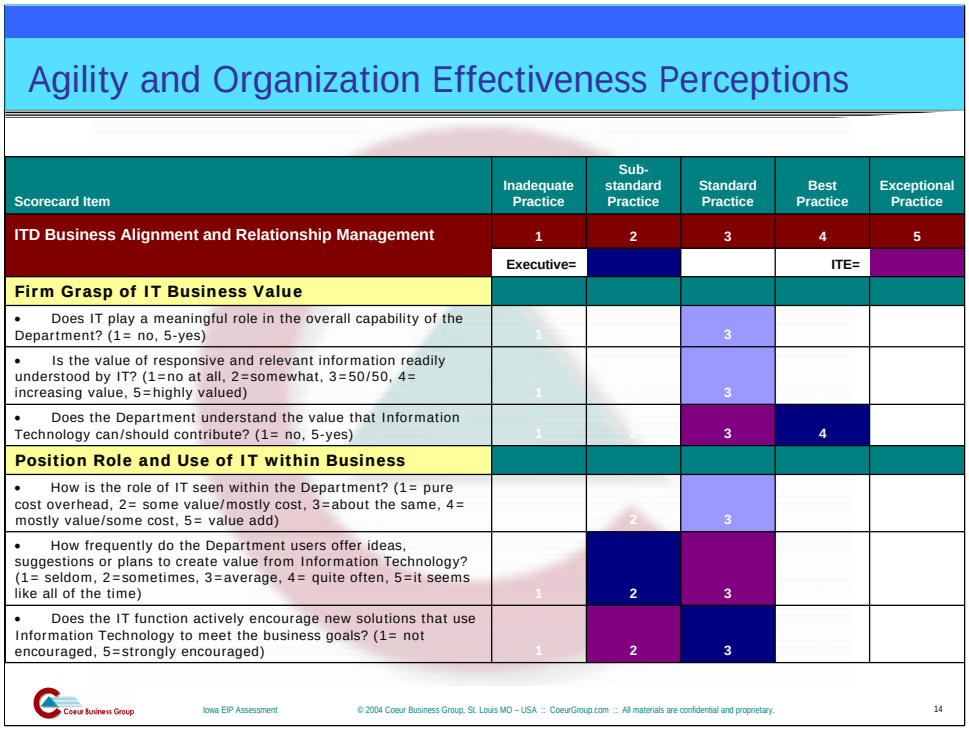
Business

Rating	No				Yes
	L		M		H
	1	2	3	4	5

Firm Grasp of IT Business Value	Score
• Does IT play a meaningful role in the overall capability of the Department? (1= no, 5-yes)	5
• Is the value of responsive and relevant information readily understood by IT? (1=no at all, 2=somewhat, 3=50/50, 4= increasing value, 5=highly valued)	5
• Does the Department understand the value that Information Technology can/should contribute? (1= no, 5-yes)	5
Position Role and Use of IT within Business	**Score**
• How is the role of IT seen within the Department? (1= pure cost overhead, 2= some value/mostly cost, 3=about the same, 4= mostly value/some cost, 5= value add)	5
• How frequently do the Department users offer ideas, suggestions or plans to create value from Information Technology? (1= seldom, 2=sometimes, 3=average, 4= quite often, 5=It seems like all of the time)	5
• Does the IT function actively encourage new solutions that use Information Technology to meet the business goals? (1= not encouraged, 5=strongly encouraged)	5
Respond to Business Technology Opportunities or Threats	**Score**
• Has your Department ever gained a significant business advantage from something it did with Information Technology? (1=don't know, 2= no, 3= on occasion 4= often 5= very often)	5
• Does the Department R&D function actively explore how to use Information Technology? (1=no R&D, 2=very little, 3=somewhat, 4=strategic initiatives only, 5= yes)	5

Defines an Immediate Business Value Agenda

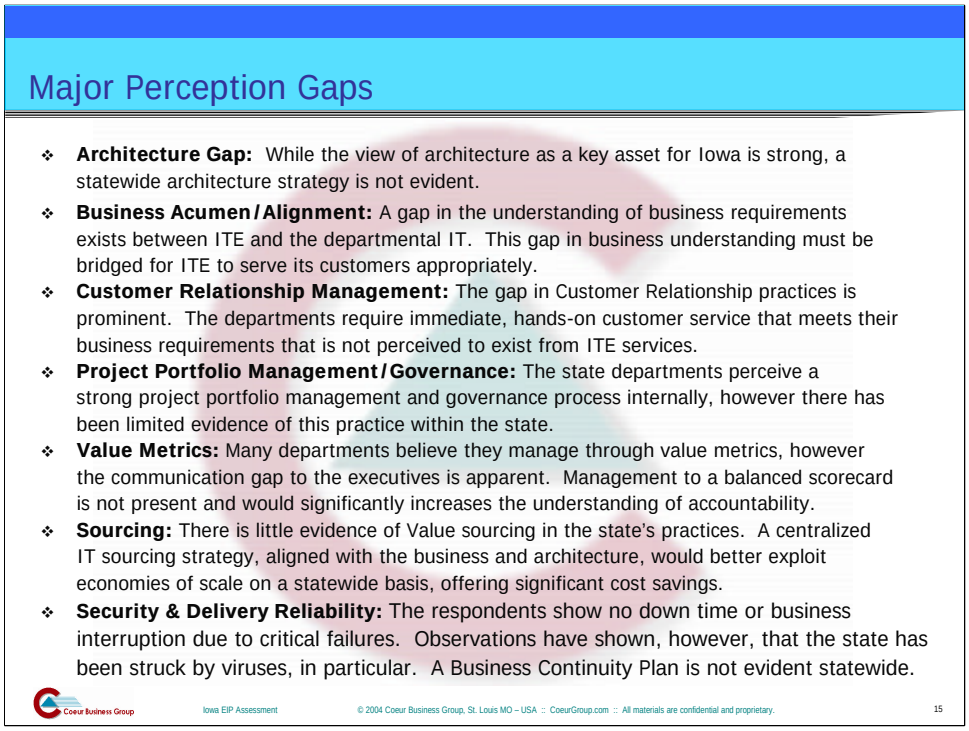
The Value Perception Survey took a snapshot of the executive perceptions of the departmental IT and ITE. This offers a view of different types of gaps, including perception gaps and communication gaps between the business and information technology.



Coeur rolled up the respondents' perceptions into a statewide scorecard offering a visual of the gaps by best practice.

In this example, the navy color represents the executives' perceptions, the magenta represents the ITE department's perception and the light blue is where the perceptions agree with no Gap present.

For each Gap identified, Coeur provides specific consolidated recommendations.



7 Major Gaps were defined based on the assessments which included:

Value Perception Survey,

Critical Success Factor (CSF) Executive interview sessions

Operational Maturity Workshop

Research

Investigation

Documentation reviews

Architecture

Government Trend:

State Information Technology is moving toward a uniform architecture, as outlined by NASCIO and recommended by the Office of Justice Programs. States are looking at common architecture as a key governmental framework for information systems integration.

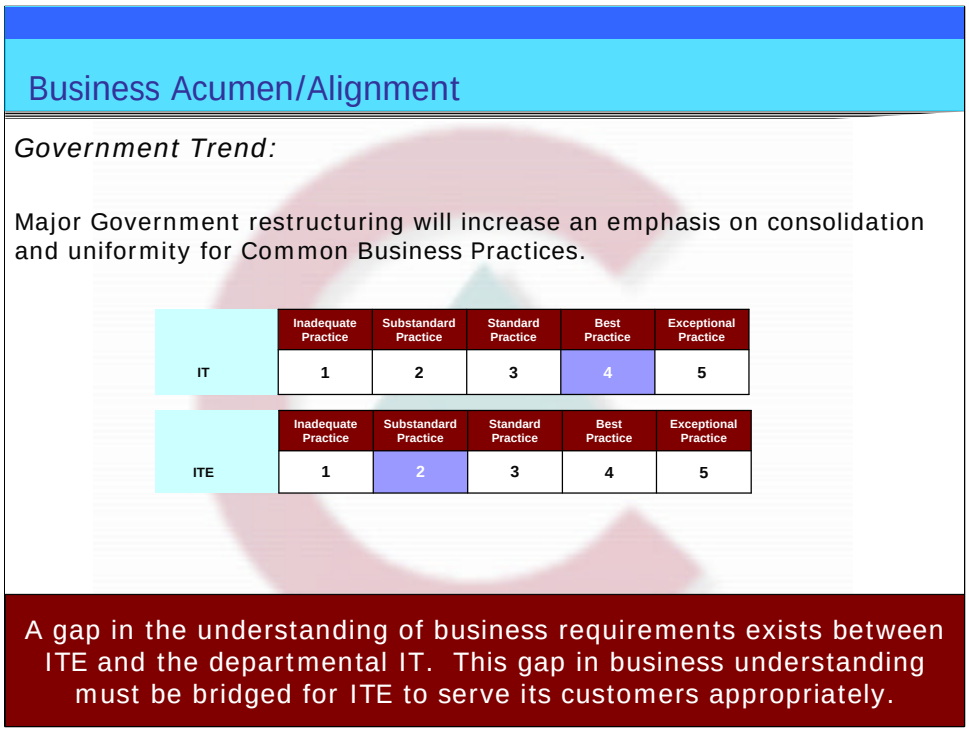
	Inadequate Practice	Substandard Practice	Standard Practice	Best Practice	Exceptional Practice
IT	1	2	3	4	5

	Inadequate Practice	Substandard Practice	Standard Practice	Best Practice	Exceptional Practice
ITE	1	2	3	4	5

While the view of architecture as a key asset for Iowa is strong, a statewide architecture strategy is not evident.

In this specific Gap There appears to be a common vision of valuing architecture in the state, however there is no substantiated evidence that an enterprise wide architecture strategy is in place.

We have included the Government Innovation Trend which supports other States, Federal and Local governmental bodies who are utilizing these “Best Practices”.



The departments' IT shows to have a strong understanding of the of their department's business, whereas there is not as strong a relationship with the ITE department. To meet the needs of the departments. This Gap is significant and needs an improvement action to close the Gap.

Most critical is the impact of differing "Business Practices" for IT across the state. These is no common Information Policy or Common Operational procedures.

Customer Relationship Management

Government Trend:

Over the next twenty-four months, Business Relationship Managers (BRMs) will evolve from Unit Level " IT Account Managers " to the Executive Level, with 50% of Jurisdictions using this role in the development of Program Policy as well as Strategic and Tactical Planning.

	Inadequate Practice	Substandard Practice	Standard Practice	Best Practice	Exceptional Practice
IT	1	2	3	4	5

	Inadequate Practice	Substandard Practice	Standard Practice	Best Practice	Exceptional Practice
ITE	1	2	3	4	5

The gap in Customer Relationship practices is prominent. The departments require immediate, hands-on customer service that meets their business requirements that is not perceived to exist from ITE services.

Similar to the business understanding, a gap exists in customer relationship practices. A common requirement is evident to have a functional focus on customer relationship management to ensure definition of business requirements and continual alignment with the business.

Project Portfolio Management/Governance

Government Trend:

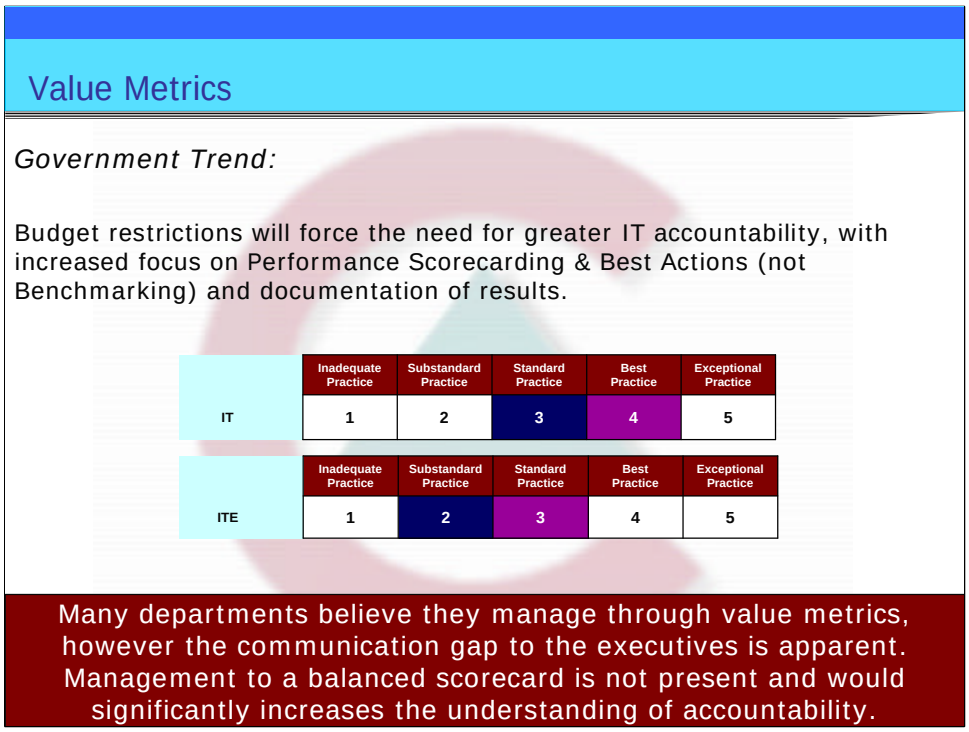
Early efforts in changing Public Policy Investment Strategies will alter IT projects funding, primarily through effective "Portfolio Management Strategies" and Enterprise Program Management Office's, enabling greater flexibility for cross-silo'd Jurisdiction implementation.

	Inadequate Practice	Substandard Practice	Standard Practice	Best Practice	Exceptional Practice
IT	1	2	3	4	5

	Inadequate Practice	Substandard Practice	Standard Practice	Best Practice	Exceptional Practice
ITE	1	2	3	4	5

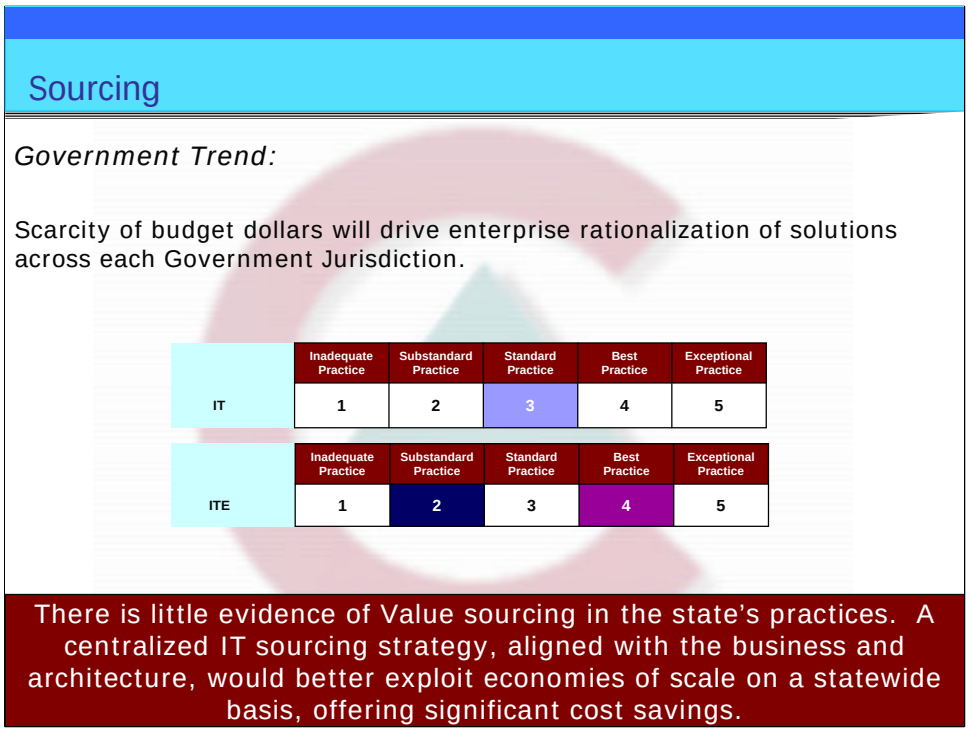
The state departments perceive a strong project portfolio management and governance process internally, however there has been limited evidence of this practice within the state.

Project and portfolio management gap exists across the departments. Limited , project management practices are in place. A clear business requirements is for IT to have professional certified Project Management responsible for project implementation.

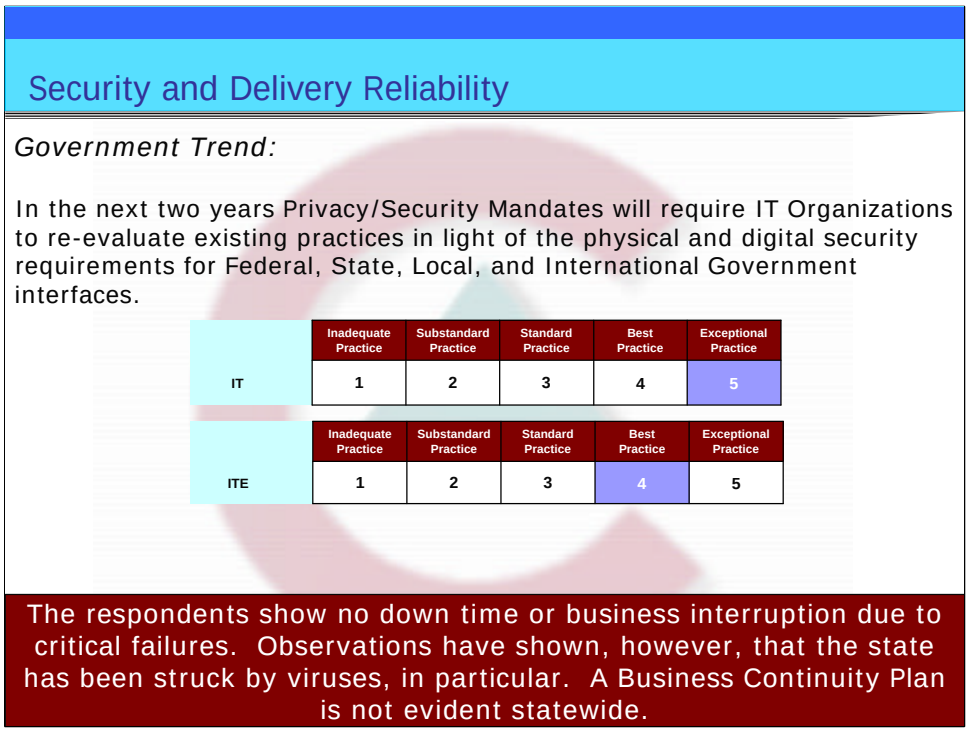


While measuring performance and value is being evident in areas within departments, a communication Gap exists to the executives. Communicating performance to the executives is necessary to realize the value of this practice.

Additionally, many of the measurements in place within IT are not highly evolved, but rather remedial in approach. Pockets of Highly evolved Performance Measures exits particularly within ITE, ICN and DOT.

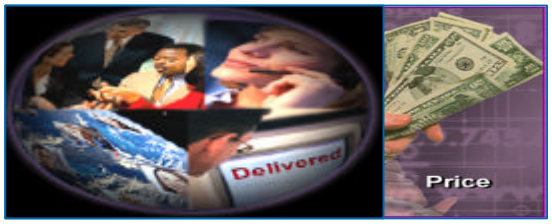


A sourcing strategy does not appear to exist on a statewide basis even with the scarcity of funding and skilled labor. Many departments are doing what they can to achieve best pricing, however, without a statewide strategy and plan for sourcing (i.e.. Best priced services procured with a Build vs. Buy Decision process), the state is missing out on savings that can be achieved through economies of scale and performance based management of suppliers.



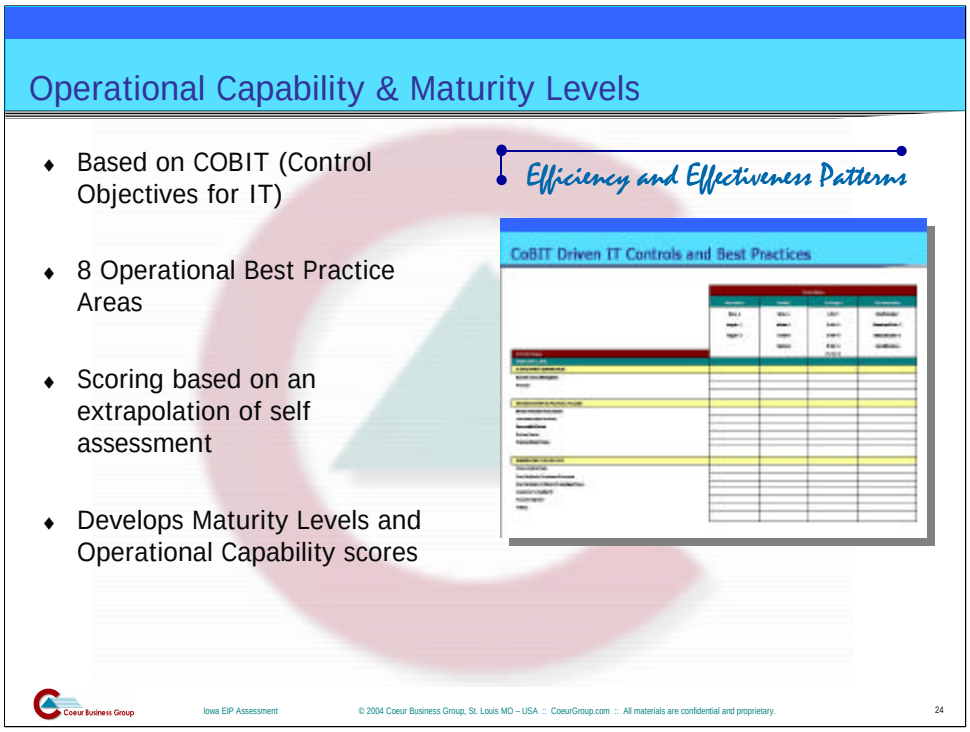
Disaster recovery, particularly as part of an overall Business Continuity Plan, has not been evident statewide. Additionally, the perception is that there have been no critical failures. In the interviews Coeur found clear evidence that there have been failures and that ITE/ICN managed through these so that it appeared seamless to the customers and constituents.

A significant impetus should be provided to ensure a Business Continuity Plan and Disaster Recover Plan are developed, implemented and tested periodically.



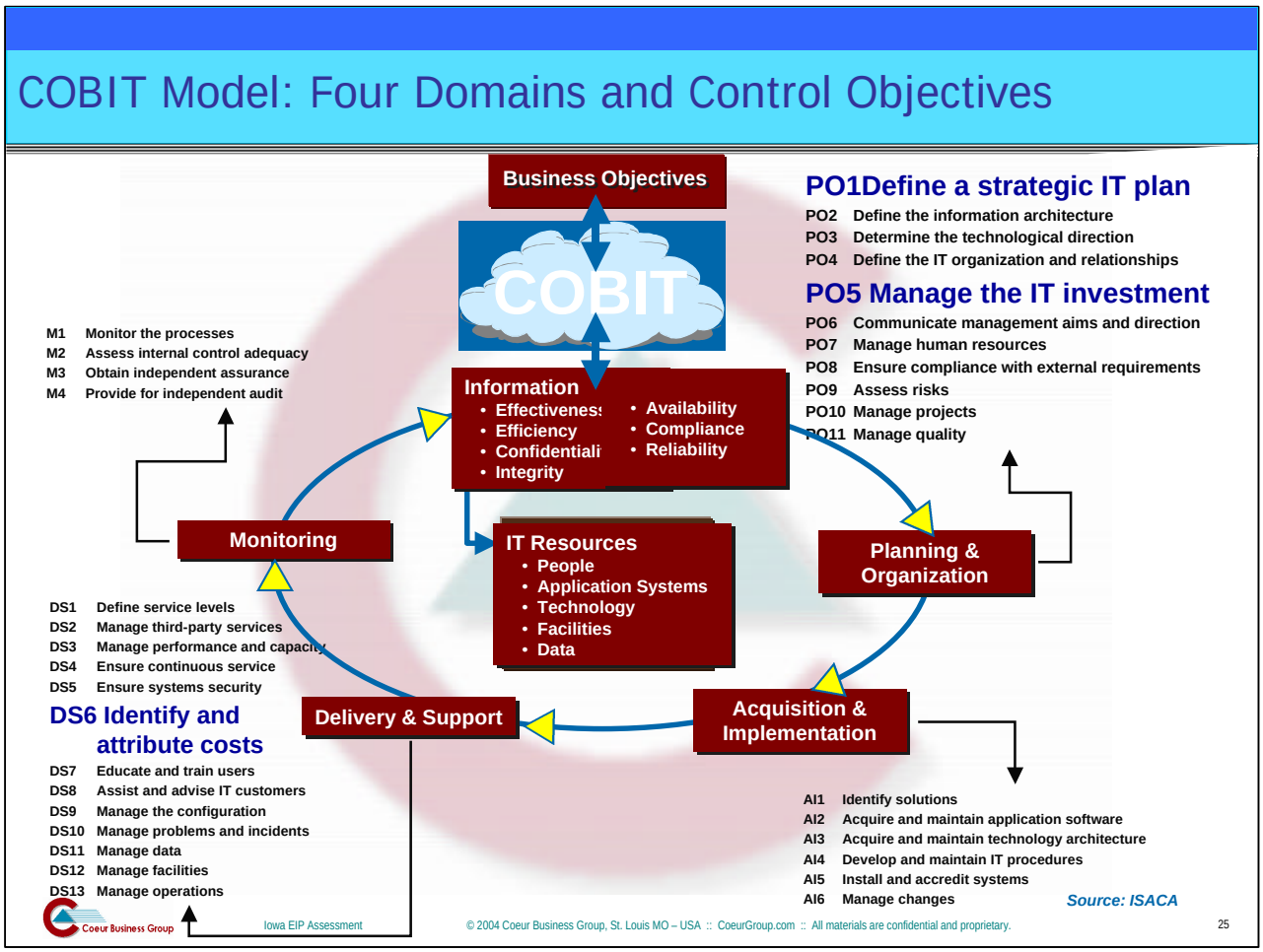
Operational Maturity
Operations Master

Coeur Business Group



Operational Maturity workshops were conducted to help define critical areas of IT Operations on specific areas. Areas assessed are based on CoBIT and Information Technology Information Library standards (ITIL).

The output from this will be used to provide you feedback on areas for improvement…utilization of this information will help Coeur understand IT capability and capacity to change… in other words Iowa's IT agility.



Abbreviation — COBIT: Control Objectives for Information and Related Technology

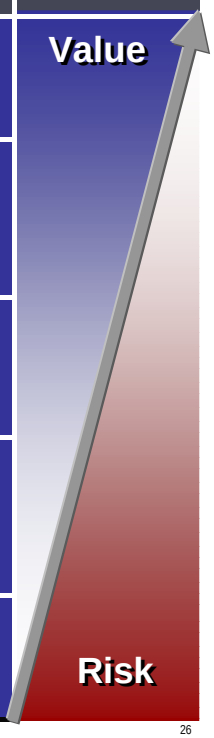
The COBIT model is produced by the Information Systems Audit and Control Association (ISACA).

For each of the four domains, associated IT processes are identified and described as high-level control objectives.

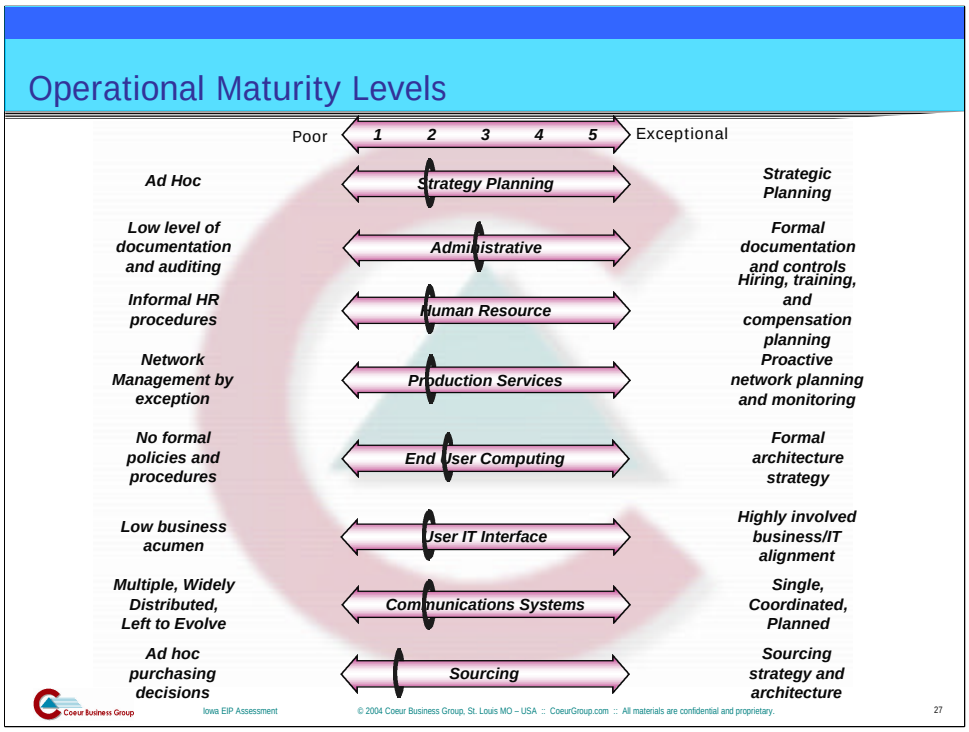
For the first domain (planning and organization), 11 high-level control objectives are identified. The first one is defining a strategic IT plan. It is amazing how many organizations do not have a plan outlining how they want to use IT to solve a business problem. Even those that have a plan do not seem to adhere to it. They go off on tangents quickly and easily. However, as indicated by this control objective, it is critically important that the strategic plan be defined.

Operational Management Maturity Model

Level	Maturity	Key Process Areas	Effective Span
5	Optimising	• Continuous process improvements is aided by quantitative feedback from the process and from piloting innovative ideas and technologies	Enterprise/ Industry
4	Managed	• Process parameters are defined and quantified. Detailed measures of operational processes and project quality are collected at enterprise level. Projects are approved according to metrics defined at enterprise level.	Multiple Business Units
3	Defined	• Process is defined with standardized results. Risk metrics and value parameters are documented and integrated into a standard portfolio of processes.	Multiple Projects
2	Repeatable	• Basic operational management processes are established to track risks and value. A process discipline is in place to repeat earlier successes. Results are predictable but not necessarily of high quality.	Single Portfolio element
1	Initial	• Processes are ad hoc. Few are defined and depend upon individual effort. Quality is unpredictable. Limited communication exists.	Variable



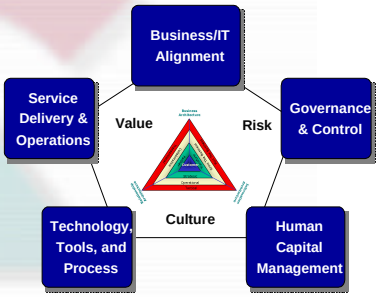
Standard Operational Maturity Levels are defined in the chart above.



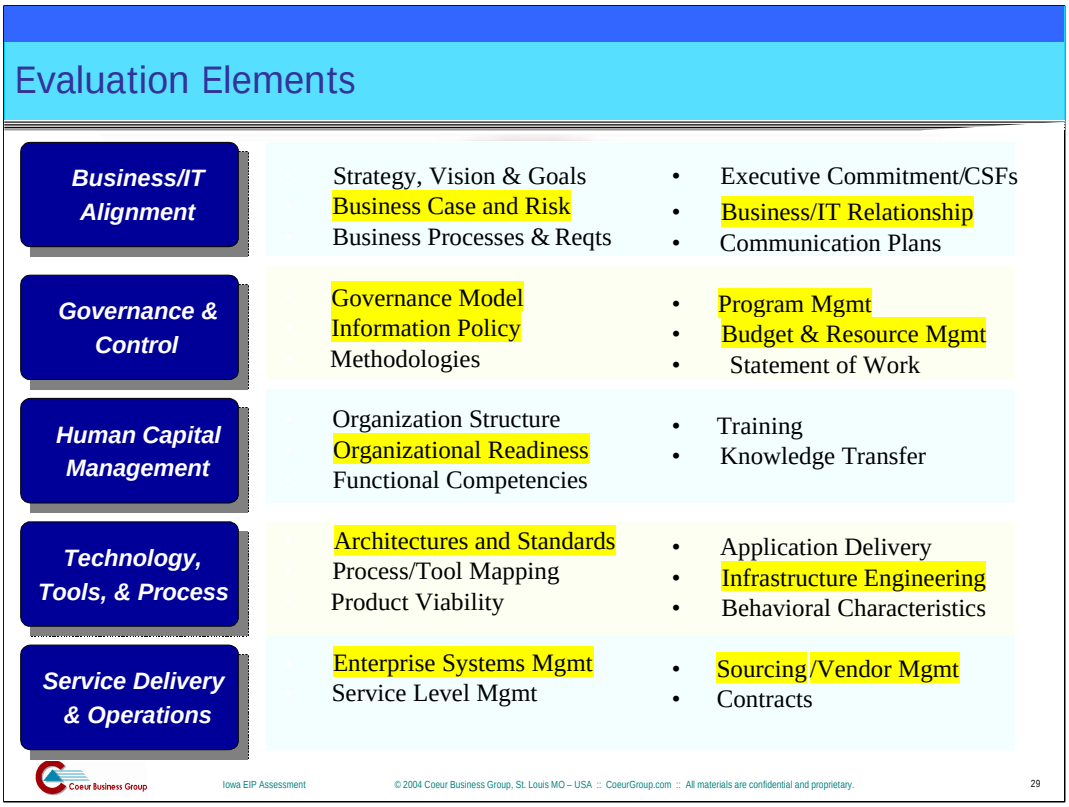
This is a statewide view of the information technology operational maturity levels. These are listed for each of the 8 assessed operational areas. Maturity Levels 1 through 5 are utilized as a standard of measure against Best Practices to the control objectives.

Multi Dimensional Analysis

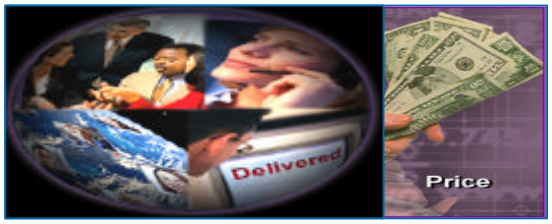
Business/IT Alignment examines the overall business strategy, executive commitment, business case for the initiative, the IT strategy, and the current state of business and IT alignment.
Governance and Control considers two key elements: Governance – the tools and techniques used to prioritize initiatives and allocate resources across the enterprise, and Control – the tools and techniques used to manage and control the program initiative.
Human Capital Management examines organizational and personnel considerations, including organization structures, culture, readiness, training, and alignment of roles, responsibilities, and incentives with objectives.
Technology and Tools examines the technology solution: enterprise architecture, information architecture, technical architecture and infrastructure, application architecture, behavioral characteristics, and tools and standards for application delivery.
Service Delivery and Operations examines the tools and processes installed to support ongoing operations.



An Analysis of the Critical Factors Effecting the EIP Assessment

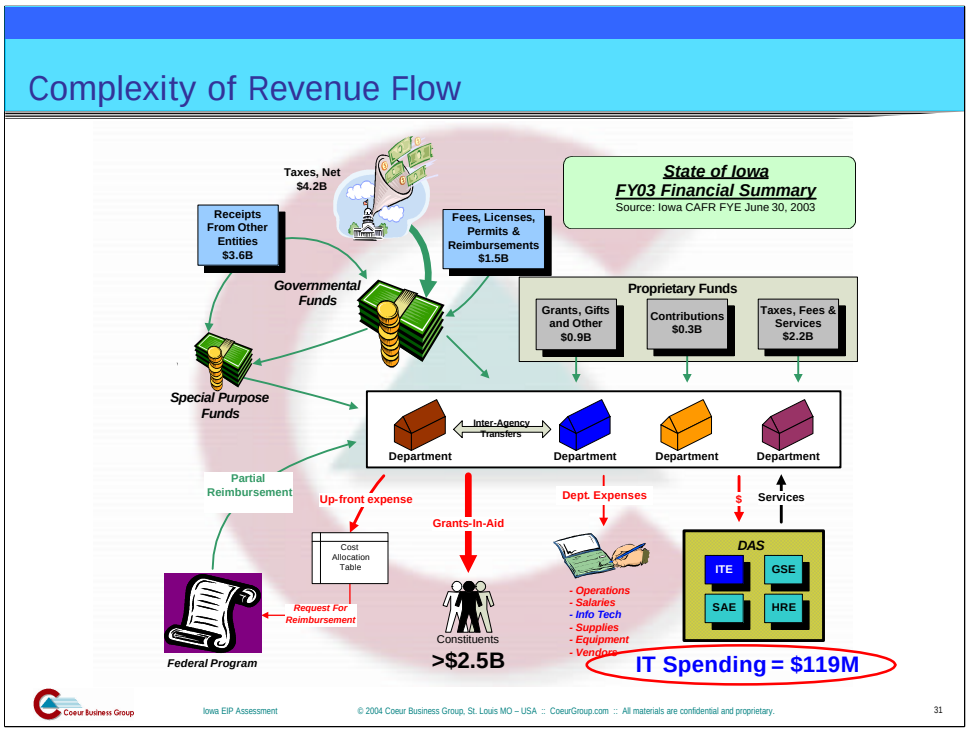


Key areas of improvement recommendations are shown above. These areas have been defined as key elements for improvements in IT efficiencies and effectiveness.

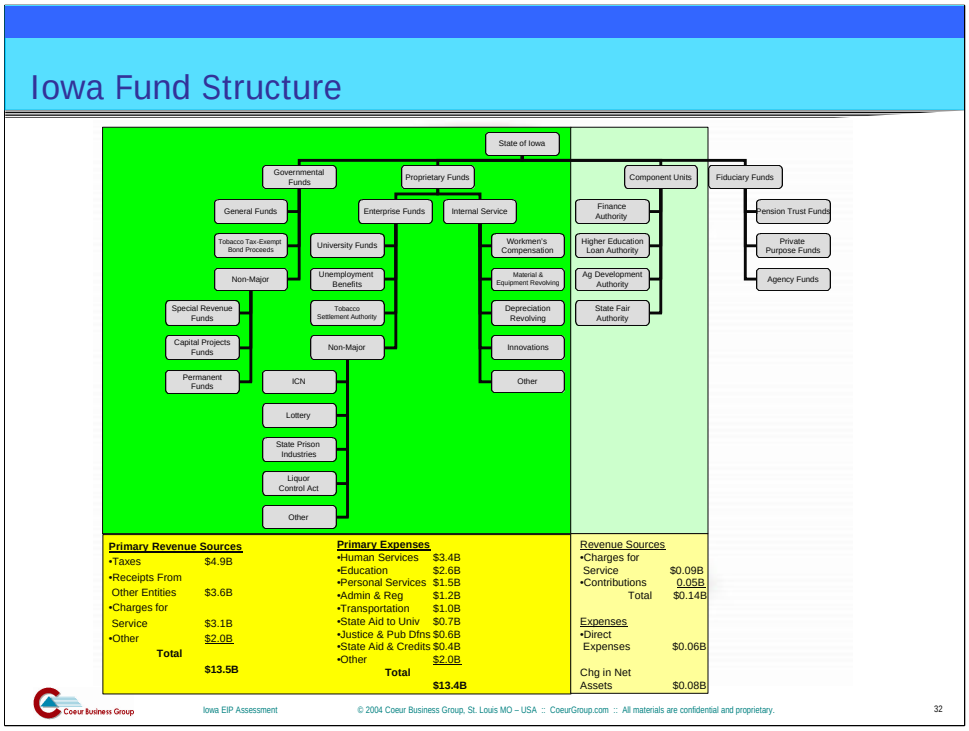


Financial Baselines

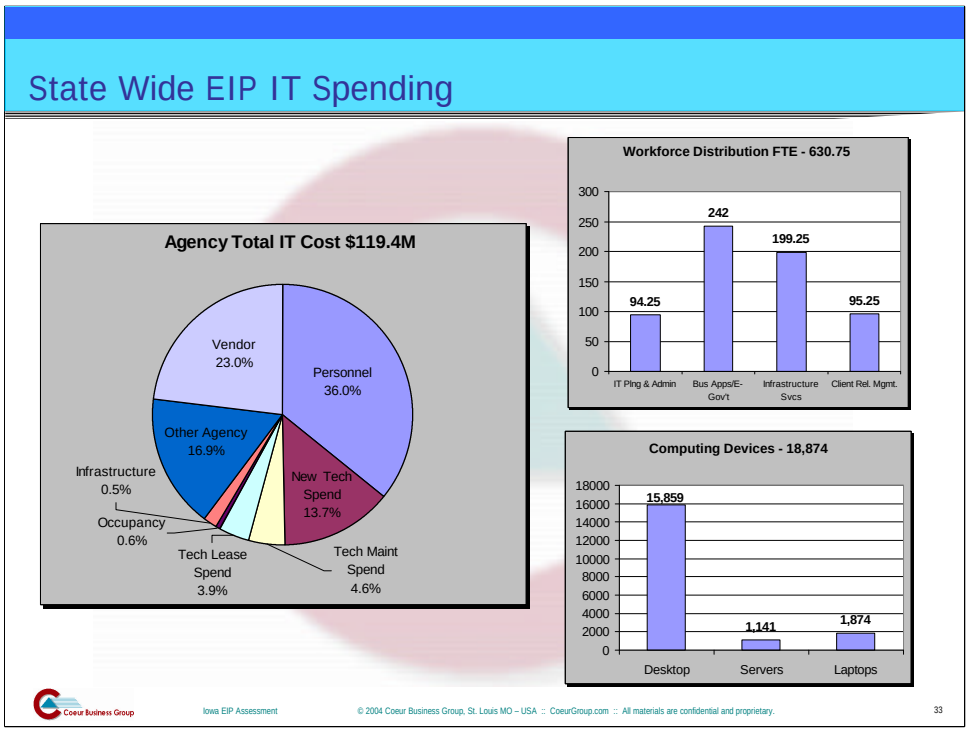
Coeur Business Group



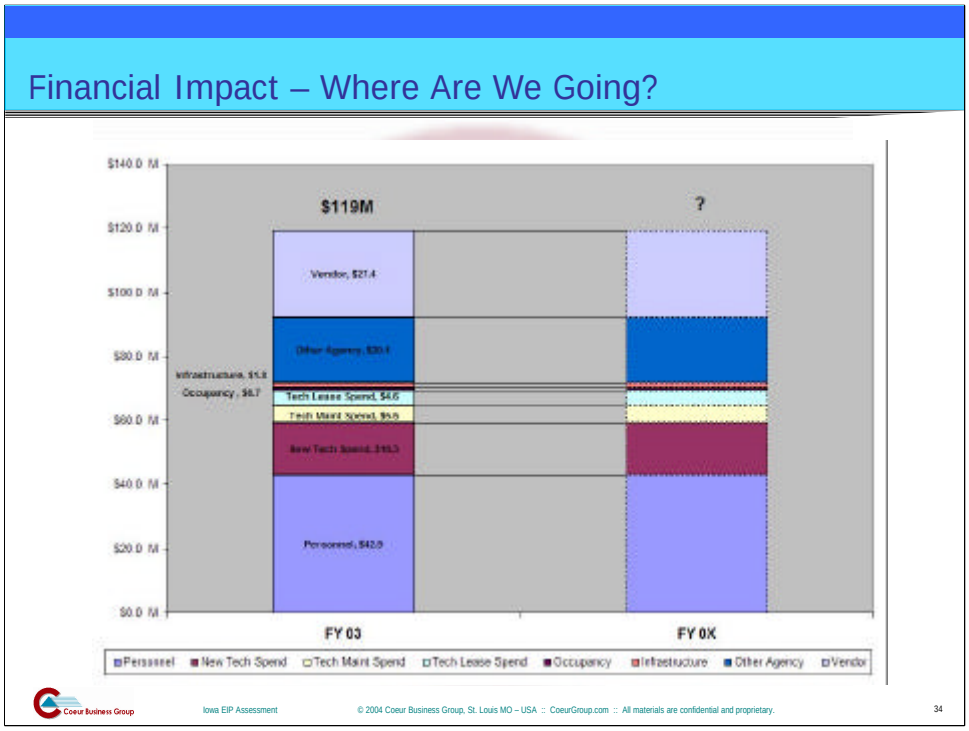
This chart illustrates the complexity of funding and resource disbursement throughout the State of Iowa. While it does not completely depict the underlying intricacies, it does provide a good high level view of how funds flow from various sources through the departments to finance operations and constituent support. Primary source of funding is the General Fund (Governmental Funds) with additional resources provided directly to the departments through the Proprietary Funds channel. Primary complexities are introduced through the myriad of Federal and other program reimbursement schemes that require sophisticated cost allocation methodologies to maximize program resources. (Source data for this chart is the Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2003.)



This chart provides further evidence of the complex nature of the State of Iowa's Fund structure. The darker green section represents the primary government activities and the framework established to track the funding and expenses of most governmental operations. The lighter green section represents other operations that are legally separate form the State of Iowa, but for which the State is financially accountable. The white section represents Fiduciary Funds. These funds represent assets held by the State as trustee or agent for others. Because the State cannot use these assets to finance operations they are not included in government-wide financial statements. (Source data for this chart is the Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2003.)

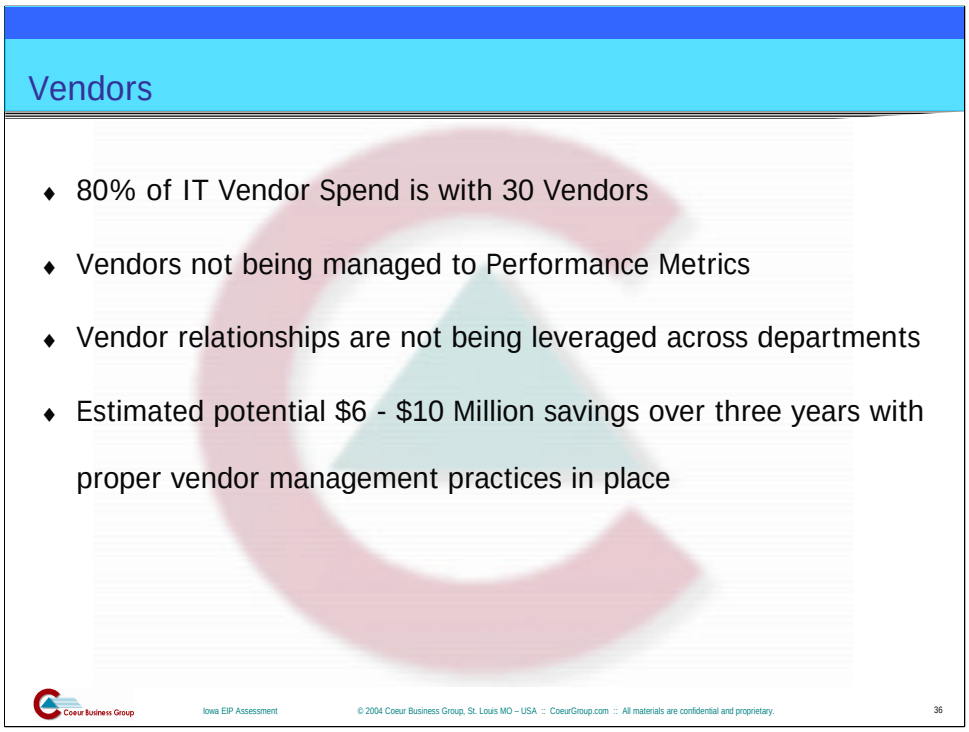


This represents a summary of the IT EIP department spending for technology during FY 03. These values were initially developed by the department CIOs. We validated the values during our Critical Success Factor interviews with the department management teams (including the CIOs). These values were then verified during separate one-on-one discussions with select departmental CFOs. Further verification was conducted with the assistance of the Dept. Of Management and the DAS State Accounting Enterprise.



Although the objective of this presentation is to primarily discuss the process findings, an initial view of the IT spending is provided here. This view provides a breakdown of the EIP Department IT spending by cost center. As we develop the various scenario recommendations we will provide greater focus and insight into the cost impact of the various scenarios.

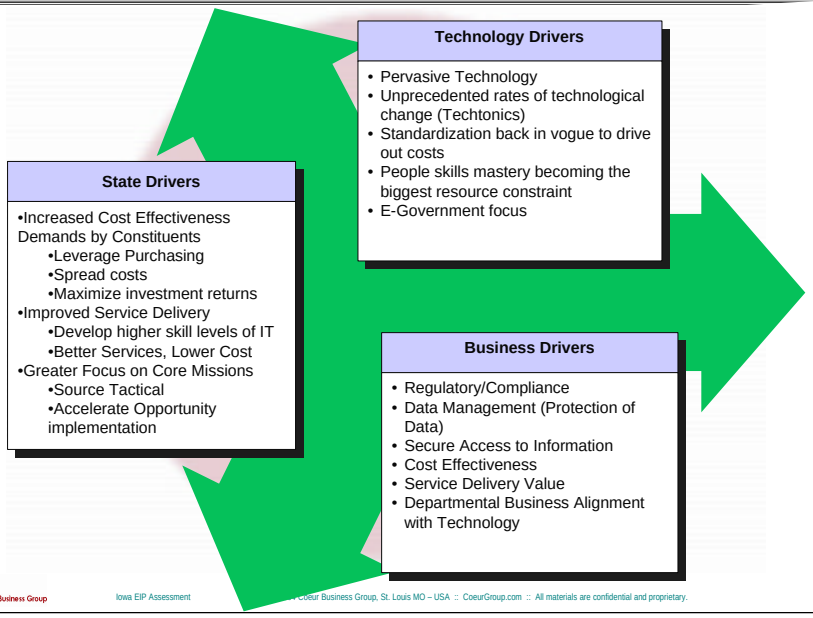
This slide provides an alternate look at the same data presented on the previous slide. This view provides the IT spending by functional category.



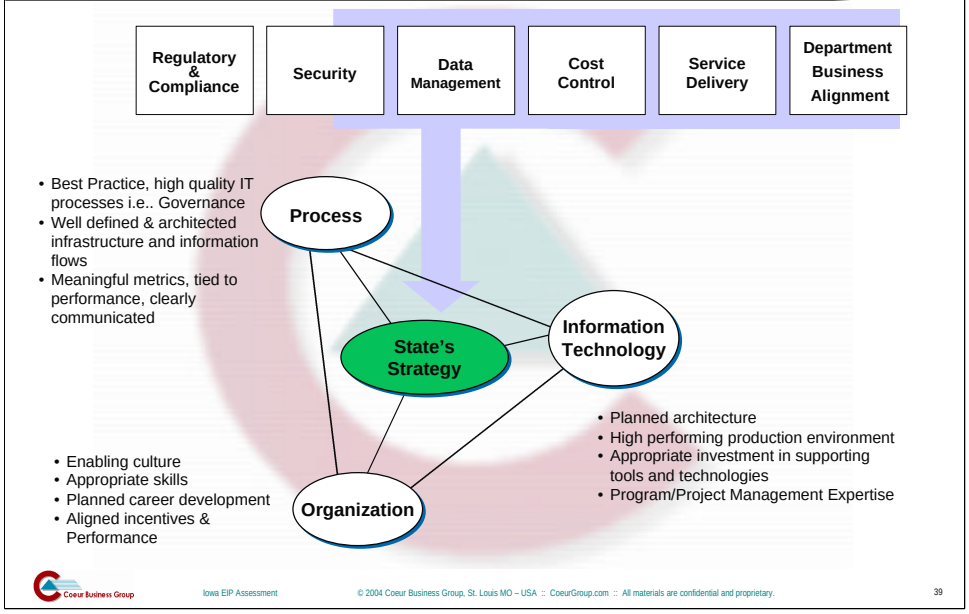
This slide provides a look at the important characteristics of the procurement and vendor management process within the EIP departments. Conclusions that can be drawn from this data are: 1) Vendor management best practices are not being employed across the departments, 2) there are opportunities for significant cost savings in this area through leveraging and consolidating vendor spending, 3) there are significant vendor management and transactions costs with a large number of suppliers that provide only 20% of the value of good and services purchased.

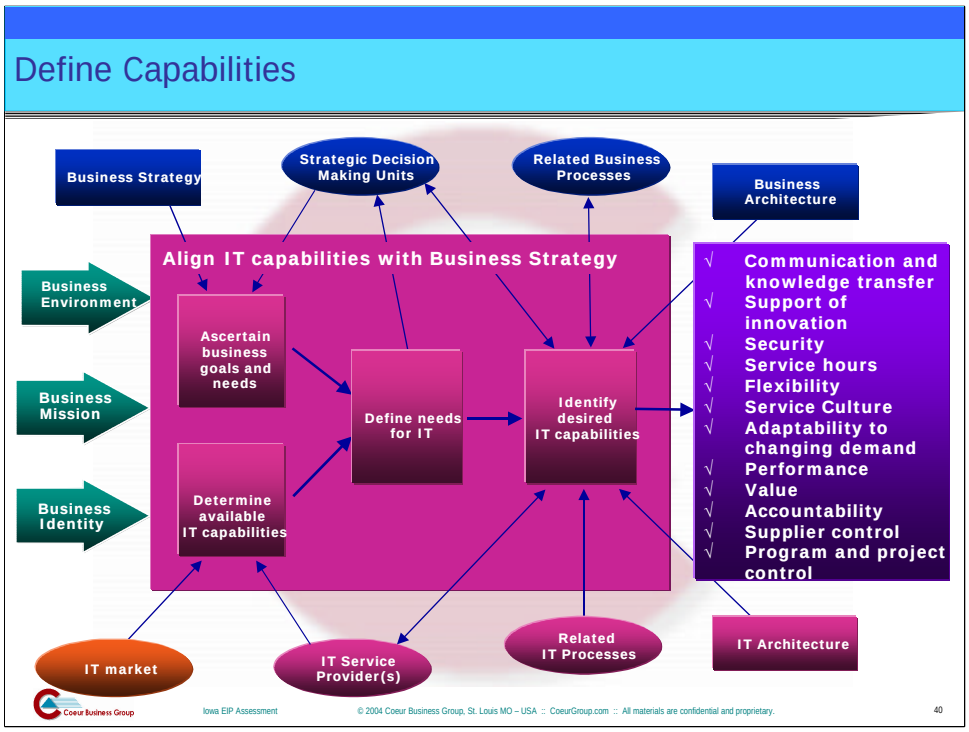
Course of Action

Forces That Are Reshaping State Government in Iowa at an Unprecedented Rate



The Business Strategy Drives Implications for IT Across the Classic Dimensions





Coeur Group's methodology included tools that address each of the key areas shown above.

Preliminary "Process" recommendations are shown above. These intern answer each specific question asked in House File 534.

The focus for improvements is defined by the IT Value Chain addressing Departmental Business Drivers → Defining Departmental Business Information Requirements→ which translate to specific Requirements for Technology Architecture

The 8 specific "Process" recommendations will be critical to the State of Iowa's success regardless of what organizational structure is present.

Next Steps

Immediate Actions Include:

- Review and comment on Coeur Group's unbiased recommendations and actions.
  - *Full set of findings documentation will be forwarded via Wes Hunsberger.*
- Communicate findings and preliminary recommendations to the departments.
- Prepare for a working session on October 15.

We ask the EIP Steering committee to do the following prior to our next session.